

ABSTRACT

A system for acquiring and transmitting, in real time, data representing the position in space, in terms of spatial coordinates and inclination with respect to a reference point, of a video camera, while the camera moves along a trajectory. The acquired data thus acquired, once processed, permit determination of the position and inclination of the images obtained. The system consists of two principal subsystems: a module containing an inertial sensing unit to be attached to the camera and a module for data processing using stored software programs communicating with the inertial sensing unit via a connection either wired or wireless. It has applications in the integration of images captured by the camera with images from other sources and in navigation within a virtual universe.